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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,231	06/26/2003	Tim A. Renfro	42P16892	8206
8791	7590	07/26/2004	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR LOS ANGELES, CA 90025			HAMMOND, BRIGGITTE R	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,231

Applicant(s)

RENFRO ET AL.

Examiner

Brigitte R. Hammond

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 28-42 is/are pending in the application.
- 4a) Of the above claim(s) 10-12, 32, 33 and 37-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-15, 28-31 and 34-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's election without traverse of Specie 1, figure 3 is acknowledged.

Newly submitted claims 37-42 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 37-40 do not read upon figure 3 and are related to the other claims as a combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the computer system does not have the particulars of the socket, such as the frame and the grid. The subcombination has separate utility such as the socket can be used in any computer system.

Claims 10-12 are also alternate embodiments (See page 14, paragraphs 0038 and 0039 of Applicant's Specification).

Newly submitted claim 42 appears to be an alternate embodiment, especially since a second component is not shown in fig. 3.

Newly submitted claims 32 and 33 are also an alternate embodiment (See page 14 of Applicant's Specification).

Accordingly, **claims 10-12, 32, 33 and 37-42 are withdrawn** from consideration as being directed to a non-elected invention.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the power and ground planes (claims 5,6), the cable receptacle having contact prongs, being self-piercing, spring-loaded (claims 10-12) and having a guide, latch and cable connector (claims 32-34) **must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.**

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid **abandonment** of the application. **The objection to the drawings will not be held in abeyance.**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-9, 31 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Trobough et al. 6,347,946. Trobough et al. discloses a socket 200 comprising: a socket grid (not numbered, see at 232 in fig.2b) to receive pins from component 102; a frame 204 coupled to the socket grid to provide structural support and a cable receptacle 208 integrated into the socket to receive a cable.

Regarding claims 2-4 and 31, signals are routed through the socket (col. 2, lines 48-52), and to the motherboard 212.

Regarding claim 7, the socket includes an actuator 220.

Regarding claims 8 and 9, the component is an IC chip(set)102.

Regarding claim 34, the cable receptacle is a cable connector.

Claims 28,29 and 41 are is rejected under 35 U.S.C. 102(b) as being anticipated by Narozny et al. 4,257,028. Narozny discloses a method of mounting a component 106 comprising; placing the component 106 in a socket 20, the socket having a grid to receive pins from the component and connecting a cable 60 to a cable receptacle 24 integrated into the socket, the cable receptacle routing signals between the cable and the pins.

Regarding claim 29, further including routing one or more signals through the socket (not shown, inherent, in order for the signal to get to the component pin).

Regarding claim 41, connecting the cable 60 comprises inserting a cable along guides of the cable receptacle and closing a latch 28 to secure the cable 60 (col. 2, lines 54-70).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trobough et al. in view of Brandeau 4,173,388. Trobough et al. does not disclose power and ground signals being provided through a power plane embedded in the socket.

However, Brandeau discloses power and ground signals being provided through power planes (20,25) embedded in the socket (col. 4, lines 25-35). It would have been obvious to one of ordinary skill to modify the socket of Trobough et al. by providing the power and ground signals being provided through power planes embedded in the socket for a good electrical connection.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trobough et al. 6,347,946. Trobough et al. discloses the invention substantially as claimed except for the frame and the socket grid being manufactured as a single piece. However, it would have been obvious to one having ordinary skill in the art to integrally form the frame and the socket grid so that the number of parts and steps in an assembling process can be reduced, since it has been held to be within the general skill of a worker in the art to make plural parts unitary as a matter of obvious engineering choice. In re Larson, 144 USPQ 347 (CCPA 1965); In re Lockart, 90 USPQ 214 (CCPA 1951).

Claims 14 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noble 6,359,783 in view of Trobough et al. 6,347,946. Noble discloses a computer system (not shown) comprising a central processing unit (CPU) 420; a memory 410 coupled to the CPU 420, an integrated socket 340 to receive the CPU; a socket grid (not numbered) to receive pins from the CPU; a frame 344 coupled to the socket grid to provide structural support. Noble does not disclose a cable receptacle integrated into the socket to receive a cable. However, sockets having a cable receptacle integrated into the socket to receive a cable are well known in the art as evidenced by Trobough et al. Trobough et al. disclose a socket 200 having a cable receptacle 208 integrated into

the socket to receive a cable. Therefore, it would have been obvious to one of ordinary skill to modify the socket of the computer system of Nobel a cable receptacle integrated into the socket to receive a cable for providing electrical access to a chip as taught by Trobough et al.

Regarding claim 35, the signals are routed between the pins and the cable receptacle.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noble in view of Trobough et al. as applied to claim 35 above, and further in view of Brandeau. Neither Noble nor Trobough et al. disclose the cable providing various types of signals (power, ground, etc.) However, Brandeau discloses a cable providing various types of signals (power, ground, see col. 1, lines 10-18). It would have been obvious to one of ordinary skill to modify the cable of Naronzny by providing the cable with various types of signal configurations as taught by Brandeau for versatility.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nobel and Trobough et al. as applied to claim 14 above, and further in view of Solomon et al. 6,606,679. Nobel discloses a memory coupled to the CPU. Neither Trobough et al. nor Nobel disclose a memory control hub coupled between the memory and the CPU. However memory control hubs coupled between the memory and the CPU of a computer system is well known in the art as evidenced by Solomon et al. disclose a memory control hub 4 coupled between a memory 6 and a CPU 2. Therefore, it would have been obvious to one of ordinary skill to modify the computer system of Nobel as

modified by Trobough et al. by providing a memory control hub coupled between a memory and a CPU as taught by Solomon et al. for transmitting and controlling data.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naronzny et al. in view of Brandeau 4,173,388. Naronzny does not disclose the type of signals the cable provides. However, Brandeau discloses a cable providing various types of signals (power, ground, see col. 1, lines 10-18). It would have been obvious to one of ordinary skill to modify the cable of Naronzny by providing the cable with various types of signal configurations as taught by Brandeau for versatility.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, reading "Brigitte R. Hammond".

Brigitte R. Hammond

July 19, 2004